

**DIGITAL TRANSMISSION SYSTEMS**

**T1 DIGITAL LINE**

**MAINTENANCE TESTS**

**1. GENERAL**

**1.001** This addendum supplements Section 365-225-500, Issue 5. Place this pink sheet ahead of Page 1 of the section.

**1.002** This addendum is issued to add a Power Loop Test (Test 3). This addendum affects the Equipment Test List.

**2. CHANGES TO SECTION**

**2.001** On page 6, after Step 17, add the following test.

**TEST 3**

**POWER LOOP TEST**

This test is conducted at the office repeater bay (ORB) at the office supplying power to the line. For 201 ORBs, the powering is tested at the control unit. For 206 ORBs and T1C/T1 ORBs, the power is tested at the repeater.

**APPARATUS:**

1—KS-14510 Volt-Ohm-Milliammeter (VOM) (Section 100-520-101)

**STEP**

**PROCEDURE**

**201 ORB**

- 1 Set the VOM to the 3 VOLT DC scale.
- 2 Connect the VOM + lead to the red jack on the control unit for the line under test. Connect the - lead of the VOM to the white jack. Read black DC scale.  
**Requirement:** +1.3 to +1.5 volts.
- 3 If this requirement is not met, patch off line (365-226-500) and refer to Section 365-227-500.

**NOTICE**

Not for use or disclosure outside the  
Bell System except under written agreement

TEST 3 (Cont)

STEP	PROCEDURE
<b>206 ORB and T1C/T1 ORB</b>	
1	Set the VOM to the 3 VOLT DC scale.
2	Connect the VOM - lead to the repeater -I jack (206 and 236 repeaters) or to the -V jack (221 and 231 repeaters).
3	Connect the VOM + lead to the repeater + jack (206 and 236 repeaters) or the -I jack (221 and 231 repeaters). Read black DC scale.
<b>Requirement:</b> 1.33 to 1.47 volts (140 mA line current) or 0.57 to 0.63 volts (60 mA line current).	
4	Set the VOM to the 150 VOLT DC scale.
5	Connect the VOM + lead to the repeater + jack (206 and 236 repeaters) or to the +V jack (221 and 231 repeaters).
6	Connect the VOM - lead to the -V jack (all repeaters). Read black DC scale.
<b>Requirement:</b> NORM line voltage $\pm 4\%$ .	
<b>Note 1:</b> Refer to Form E-5416 (dated 10/76) for the NORM line voltage.	
<b>Note 2:</b> The NORM line voltage may vary due to seasonal changes.	
7	Connect the VOM - lead to the repeater + jack (206 and 236 repeaters) or to the REG jack (221 and 231 repeaters).
<b>Note:</b> The following test connection is made to the same repeater as that of Step 7.	
8	Connect the VOM + lead to the repeater REG jack (206 and 236 repeater) or to the -V jack (221 and 231 repeaters). Read black DC scale.

END

## TEST 3 (Cont)

STEP

PROCEDURE

POWER LOOP VOLTAGE	REQUIREMENT
-48V and GRD	Norm reg voltage $\pm$ 2 volts
+130V and GRD	Norm reg voltage $\pm$ 5 volts
+130V and -48V	Norm reg voltage $\pm$ 7 volts
+130V and -130V	Norm reg voltage $\pm$ 10 volts

**Note 1:** The NORM regulator voltage may be obtained from Form E-5416 (dated 10/76).

**Note 2:** The NORM regulator voltage may vary due to seasonal changes.

- 9 If the requirements of Step 3, 6, or 8 are not met, patch off line (365-226-500) and refer to Section 365-227-500.